[For additional information on the growth of plantation agriculture see category 311, 6: Spate AW1 India.]

10: Sen K-3, 4 (ca. 1955) 1962 AZ2 Andamans AZ2

241 gave way to the development of agriculture over an extremely limited
563 area in South Andaman — paddy cultivation and coconut plantations have succeeded quite well. The plantations of rubber, tea and coffee also developed in the South Andaman over very small areas but ultimately did not prove very successful, partially due to the lack of adequate care. Simultaneously with the settlement of the refugees, new areas are being brought under plough which had never been interfered with human hands. The growth of agriculture based on rice cultivation together with vegetable gardening, development of orchards, coconut cultivation will bring about self-sufficiency of the islands and make the people self-supporting.

000 Industrial development of any big scale cannot be foreseen except the lumbering industry because of the lack of resources, power and also of any appreciable home market. Besides lumbering, the fishing industry, if properly co-ordinated with the mainland, can be developed to a
[438] great extent. A number of cottage industries based on coconuts, sea and forest products have developed, of which the coirmaking has developed most.

13 The characteristics, common to the tropical islands, are to a large degree manifested in these islands. The physical environment suffers from a number of limitations. [illegible] and humid climate is ameliorated by the influence of the sea in all parts as none of them are more than 10 miles away from the sea. The problems of soil are quite tremendous and such signs are only discernible to a small extent in the islands which might share greater proportions in the future if adequate measures of careful cultivation are not undertaken. The natural vegetation should be carefully preserved and regenerated after the felling of the trees not only for the conservation of the vegetation but also for saving the soil from the serious consequences of erosion. The
178 cultural environment is a mosaic of variety because of the different
● 433 types of people who have been living in these islands, however negligible
563 their number might be. The imbalance of regional growth, being exclusively confined to the South Andaman, is being removed with the growth of settlement in the other parts of the islands and the indications of the shift in gravity of the economic interests is synchronising with the progress of settlement in the North and Middle Andamans. Mayabunder is handling a greater share in the movement of commodities and passengers. Such changes are undoubtedly very much welcome as the lowering of the disparities in the regional economy and growth speak of an all-round regional development.

10: Sen K-3, 4 (ca. 1955) 1962 AZ2 Andamans
Nicobars AZ7

The Nicobar group of islands being separated off from the Andaman Islands by the Ten Degree Channel, though constitute a part of the continuation of the island in the north, the geographical entity of these islands are conspicuously different from that of the others. The Nicobar Islands have an area of 635 sq. miles and have 19 islands, out of which 12 islands are inhabited. The human habitats are exceedingly interesting and these people are distinctly different from the aborigines of the Andamans not only in their physical characteristics but also in their cultural attributes. Material life is much more improved and they have been all the time experiencing a healthy growth in comparison to the rapid decay of the Andaman aborigines. Culturally the affinity seems to be closer with the Indonesian islands. Shom Pens, the highlanders of the Great Nicobar, live in perfect isolation and have an extremely primitive economy. The staple crop is coconut and a number of fruit trees and yam are also grown. Some of the islands have become extremely overcrowded and need immediate dispersal to some of the less crowded islands. A detailed geographical treatment would require much more words to say about these thriving people and their contact with the foreigners than those of the Andamans. However it remains incomplete if the study of the Nicobar Islands is not incorporated in that of the Andaman islands. Therefore, in spite of the distinct geographical contrast with the Andamans, a short geographical summary has been given at the end of the book.

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[not processed. - Analyst]

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10: Sen K-3, 4 (ca. 1955) 1962 AZ2 Andamans AZ2

313 492 power in the forests. The net revenue of the forests from 1869 amounted to Rs. 45,65,764 inclusive of a capital asset of Rs. 21,39,983.

313 The present day forest exploitation has to some extent been revitalised with the introduction of regenerating processes and use of disel engines for the trams carrying logs from the spot of exploitation to the jetty wherefrom it is carried down to Port Blair for sawing and finally exported to the mainland and London. The working of the forest in the Andamans and its preparation for marketing undergo a number of stages. After a proper survey, a spot of exploitation is selected where a forest camp is opened near the jetty with a sufficient strength of imported labourers from India. The forest camps are erected with local timber and the exploitation proceeds from the spot in the immediate neighbourhood of the jetty (exclusive of the mangrove forests) to the interior regions. Along with the expansion of the exploitation area, tram lines are laid down from the jetty onwards. The felling is done by chiselling the trunk of the trees and then it is pulled by a few elephants for breaking it down. This completes the felling of the tree and after properly cutting all the branches, the logs are carried by an elephant with the help of his trunk and are unloaded from the tram. Afterwards, it is taken to the jetty where 313 505 the logs are again unloaded and rafted in a tank-landing craft to make them ready for transportation to Chatham Island where it is shown into standard size (not always) and is exported to the markets. The transportation of the logs from the spot of exploitation to Port Blair is always done on water ways. The success in the transportation of the logs have been facilitated by the innumerable harbours and creeks making easy the passage of the boat into the interior parts of the islands and it is found that the average drag seldom exceeds a mile and at the same time exploitation requires some experience of local conditions and foresight, as the coastal areas are exposed to the open seas and advantage has to be taken of the different seasons of the year to work in different tracts.

313 The yield of merchantable timber is only 15 tons per acre. An assessment of the future potentialities of merchantable timber with the introduction of the present method of regeneration has been given by Sri Chengapa[1]. The sustained or perpetual yield of the forests is about 135,000 tons per year and according to him, with the introduction of the present method of regeneration, the yield per acre is expected to be as much as 75 tons per acre, a five fold increase of the present yield. The

[113] 1 Chengapa, B. S. — The Andaman forests and their development; Census of India, 1951, Volume XVII, Andaman & Nicobar Islands by A. K. Ghosh.

10: Sen K-3, 4 (ca. 1955) 1962 AZ2 Andamans AZ2

approximate estimate of the output of the different types of timber is given below. 313 433

Annual yield — 675,000 tons,

Padauk — 7000 tons, Garjan — 28,0000 tons, White Dhup — 21,000 tons, Papita — 28,000 tons, Koko — 500 tons, White Chuglam — 7,000 tons, Black Chuglam — 2,500 tons, Pyinma — 1,500 tons, Badam — 11,000 tons, Didu — 7,000 tons and others — 14,000 tons.

Source: Chengapa, B. S.—The Andaman forests and their development; Census of India, 1951, Volume XVII, Andaman & Nicobar Islands by A. K. Ghosh.

The limitations in the exploitation of the forest resources of the Andamans are not few. The problems faced upto 1934-35 were primarily because of the inefficient methods in the extraction of timber and absence of due attention in the regeneration of the forests. Previously the exploitation was confined only to the coastal areas because of the easy accessibility, but the vast tracts of rich resources in the interior remained virtually untapped in the absence of any economic device. The construction of an experimental tramline in the Rangat valley, however, proved successful. The regeneration of the forests was also little cared for. The new plantations hardly exceeded 100 acres though the exploitation was widespread over large areas. Improvements in the line of regeneration were discernible since the year 1932 and marked improvements were brought about by the year 1936-37. According to this new device, the old crop is removed in two or more successive fellings allowing nature to do the sowing. 313 185

However, some of the limiting factors in the exploitation, transportation and marketing of the forest products are given below. 313 433

(1) The selection of the forests for exploitation is made from a very vague idea and proper surveys are hardly undertaken to realise the actual conditions in the fields which really happen to be quite different from theoretical speculations. It is found that many forests specially in the North Andaman are yet to be explored. Hence the insufficiency of knowledge regarding the forests has made the proper selections of the actual spots of exploitation an impossibility.

(2) The forest working in many regions have to be abandoned because of the seasonal water-supply.

(3) The trees in the forests do not occur in pure stands and hence random felling operations are done irrespective of the type of trees. It is estimated that the total wastage of timber in the Andaman forests is approximately 1 crore of rupees in value.

11: Cipriani E-3 (1951-1955) 1966 AZ2 Andamans AZ2

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805 or form of numerical evaluation is further support for the extremely low stage of cultural development at which they became isolated.

22 ART

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532 When painting their bodies with ochre the Onges have no idea of symbolic representation, and use only geometrical designs. These invariably seem spontaneous, and in my view do not represent a degenerate form of some more highly evolved art, half forgotten over the centuries; in short, the 'artists' of the Andamans, with no conception of symbolism, are even today less advanced than their Palaeolithic counterparts.

23 DIGGING STICKS

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412 In late Palaeolithic deposits, stones with holes in them have been found which correspond to those still in use among peoples such as the Bushmen, to add weight to their digging sticks. The absence even today of any form of weighted stick in the Andamans, where stone is plentiful, would appear to antedate the culture at least to early Palaeolithic.

24 HUNTING

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[411] The Onges still use the Palaeolithic throwing stick, although it is not their main hunting weapon. They have no idea of fixed traps, which must from the evidence have been known in Palaeolithic times, and it is hard to believe that a people so dependent upon hunting would have lost the art once it had been acquired. They have crude nets which the women use for fishing, but these are probably a comparatively recent introduction, which has arrived via the Nicobars.

25 DOMESTIC ANIMALS

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174 The Andamanese have none, and this would seem to add weight to the evidence for their great antiquity.

26 ECONOMY

● 433 There is no economic system of any kind, and from the evidence available it is highly unlikely that even the most primitive form ever existed.
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437 There is no conception whatever of providing for tomorrow, or of any form of exchange or barter.